

Abstract

A low cost DTV translator, which translates an incoming signal on channel A to an outgoing signal on channel B, includes a transmitter pre-equalizer whose taps are configured with tap values that pre-distort a signal so as to negate distortion caused by a high power amplifier and emission mask filter at the output of the DTV translator. This pre-distortion is accomplished by using the transmitter of the DTV translator to provided a reference signal and to use the receiver of the DTV translator as a reference receiver for the reference signal to thereby avoid the use of a more expensive external reference receiver.